



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/593,524

07/29/2008

Xin Yao

H0678.70013US00

2772

23628 7590 07/02/2009  
WOLF GREENFIELD & SACKS, P.C.  
600 ATLANTIC AVENUE  
BOSTON, MA 02210-2206

EXAMINER

ZONG, RUOLEI

ART UNIT

PAPER NUMBER

2441

MAIL DATE

DELIVERY MODE

07/02/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/593,524	<b>Applicant(s)</b> YAO, XIN	
	<b>Examiner</b> RUOLEI ZONG	<b>Art Unit</b> 2441	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

Applicant's response filed on 04/29/2009 has been received and made of record.

Claims 1-20 are pending. Claims 1-20 are rejected.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. **Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Qiao (US Patent Application 2006/0198357 A1).**

As to claim 1, **Qiao** teaches a method comprising:

configuring a proxy processing strategy (*forwarding table*, **Qiao, Para.0039, Line 5. Note that adding or modifying in Qiao, Para. 0039, Line 2, therefore configuring is disclosed) in a signaling proxy (*signaling agent*, **Qiao, abstract, line 1**), wherein the proxy processing strategy includes information about a message that needs to be proxy processed (**Qiao, Para. 0021, 0022, 0023, 0024. Note that forward table has the information about how to forward); and****

performing proxy processing on a received message (**Qiao, Para. 009 and Para. 0010. Note that the signaling needs to process the message to decide whether the signaling is concerned with media stream port or not**) and forwarding (*forwarding*, **Qiao, Para. 0011, Line 4**) the message after the signaling proxy determining that the message needs to be proxy processed by the signaling proxy according to the configured strategy (**Qiao, Para. 0011**).

As to claim 2, **Qiao** teaches a method for implementing signaling proxy according to claim 1, wherein said strategy comprises: identifying (*message identifier*, **Qiao, Para. 0011, Line 5**) a received message which needs to be processed by the signaling proxy (*signaling agent*, **Qiao, abstract, line 1**) by one or a combination of any of VPN ID, VLAN ID, MPLS ID, IP protocol type, source IP address, source port, destination IP address (*IP address*, **Qiao, Para. 0034, Line 3**), destination port of the received message (**Qiao, Para. 0034**).

As to claim 3, **Qiao** teaches the method according to claim 1, wherein the method further comprises: in the signaling proxy (*signaling agent*, **Qiao, abstract, line 1**), setting (*replaced*, **Qiao, Para. 0039, Line 7**) destination address (*relevant media stream network address*, **Qiao, Para. 0039, Line 6**) of a message to be proxy processed by the signaling proxy to be a local address (*corresponding network address*, **Qiao, Para. 0039, Line 8**).

As to claim 4, **Qiao** teaches a method for implementing signaling proxy according to claim 2, further comprising: when receiving a message from a proxied side, the signaling proxy determines that the received message needs to be proxy processed according to information of its destination address (**Qiao, Para. 009 and Para. 0010**. *Note that the signaling needs to process the message to decide whether the signaling is concerned with media stream port or not*); replacing destination address (*relevant media stream network address*, **Qiao, Para. 0039, Line 6**) of the received message with a server address and source address with a server side address (*corresponding network address*, **Qiao, Para. 0039, Line 8**) of the signaling proxy respectively, and forwarding the message (**Qiao, Para. 0039**).

As to claim 5, **Qiao** teaches a method for implementing signaling proxy according to claim 4, wherein after receiving a message sent from the server (*media gateway*, **Qiao, Para. 0040, Line 1**), the signaling proxy (*signaling agent*, **Qiao, abstract, line 1**) replaces source address (*media information*, **Qiao, Para. 0041, Line 5**) of the message

Art Unit: 2441

sent from the server with destination address (*corresponding network address*, **Qiao, Para. 0041, Line 6**) of said original message sent from the proxied side and destination address (**media information, Qiao, Para. 0041, Line 5**) of the message sent from the server with a proxied side address (*corresponding network address, Qiao, Para. 0041, Line 6*) respectively, and forwards (*sends, Qiao, Para. 0041, Line 8*) the message.

As to claim 6, **Qiao** teaches a method for implementing signaling proxy according to claim 1, wherein said signaling proxy processing comprises: changing (*replaced, Qiao, Para. 0039, Line 7*) source (*relevant media stream network address, Qiao, Para. 0039, Line 6*) and destination addresses (*corresponding network address, Qiao, Para. 0039, Line 8*) and port numbers (*Note that IP address and port of the media gateway controller configured on the media gateway MG2 is the second network address in Qiao, Para. 0033, Line 5-7, therefore, port is disclosed as a part of network address*) of the received message, replacing data of the application layer, updating a signaling state and/or creating session table (*forwarding table, Qiao, Para.0039, Line 5*) items.

As to claim 7, **Qiao** teaches a method for implementing signaling proxy according to claim 1, wherein before the signaling proxy receives a message, a forwarding strategy is configured in a network device (*signaling agent, Qiao, abstract, line 1*) through which a message sent by a proxied side passes (**Qiao, Para. 0033. Note that Agent equipment has at least two network addresses, therefore forwarding strategy**

Art Unit: 2441

*configuration is implicitly disclosed; forwarding table, Qiao, Para.0039, Line 5), the forwarding strategy stipulating that a forwarding path of the message to be proxy processed passes through the corresponding signaling proxy (Qiao, Para. 0039).*

As to claim 8, **Qiao** teaches a method for implementing signaling proxy according to claim 7, wherein when the network device (*signaling agent, Qiao, abstract, line 1*) receives a message which is sent from the proxied side and needs to be proxy processed, it forwards the received message to the signaling proxy (*signaling agent, Qiao, abstract, line 1*) according to the forwarding strategy (*note that Qiao, Para. 0039 and "multiple agent equipments may realize the media gateway traversing through multiple networks for many times, stage by stage", Qiao, Para. 0063, Line 14-16, therefore, the strategy of forwarding to signaling proxy with multiple signaling proxies is disclosed; forwarding table, Qiao, Para.0039, Line 5).*

As to claim 9, **Qiao** teaches a method for implementing signaling proxy according to claim 7, wherein in the signaling proxy (*signaling agent, Qiao, abstract, line 1*), information of the forwarding path of a message returned from the server is obtained in a configuration or study way and recorded (**Qiao, Para. 0041**); after the signaling proxy (*signaling agent, Qiao, abstract, line 1*) receives the message returned from the server, it forwards the message according to the recorded information (*forwarding table, Qiao, Para. 0041, Line 4*) of the forwarding path.

As to claim 10, **Qiao** teaches a method for implementing signaling proxy according to claim 7, wherein said network device is configured to be a default gateway (*signaling agent, Qiao, abstract, line 1. Note that "Agent equipment 1 has at least two network addresses, in which one is a first network address in network 1 of the media gateway controller MGC side, and other one is a second network address in network 2" in Qiao, Para. 0033, Line 1-4, therefore Agent equipment 1 is a gateway of network 2*) of the signaling proxy (*signaling agent, Qiao, abstract, line 1*), and when the signaling proxy receives the message returned by the server, it processes said message and sends the processed message to the default gateway (**Qiao, Para. 0041**).

As to claim 11, **Qiao** teaches an apparatus comprising:

a unit (*agent equipment, Qiao, Para. 0033, Line 1*) for receiving and recognizing messages, which is configured with a proxy processing strategy, used to recognize a received message which needs to be processed (**Qiao, Para. 0010 and Para. 0011. Note that the signaling needs to process the message to decide whether the signaling is concerned with media stream port or not), wherein the proxy processing strategy includes information about a message that needs to be proxy processed (**Qiao, Para. 0021, 0022, 0023, 0024. Note that forward table has the information about how to forward**);**

a unit (*agent equipment, Qiao, Para. 0033, Line 1*) for processing messages, which proxy processes said message that needs to be processed (**Qiao, Para. 0011**);  
and



Art Unit: 2441

a unit (*agent equipment*, **Qiao, Para. 0033, Line 1**) for forwarding (*forwarding*, **Qiao, Para. 0011, Line 4**) messages, which forwards (*forwarding*, **Qiao, Para. 0011, Line 4**) the processed message to a corresponding server.

As to claim 12, **Qiao** teaches the apparatus according to claim 11, wherein said proxy processing strategy comprises: identifying (*message identifier*, **Qiao, Para. 0011, Line 5**) a received message which needs to be processed by the signaling proxy (*agent equipment*, **Qiao, Para. 0033, Line 1**) by one or any combination of VPN ID, VLAN ID, MPLS ID, IP protocol type, source IP address, source port, destination IP address (*IP address*, **Qiao, Para. 0034, Line 3**), destination port of the received message (**Qiao, Para. 0034**).

As to claim 13, **Qiao** teaches an apparatus for implementing signaling proxy according to claim 11, wherein the signaling proxy (*agent equipment*, **Qiao, Para. 0033, Line 1**) processing comprises: changing (*replaced*, **Qiao, Para. 0039, Line 7**) source (*relevant media stream network address*, **Qiao, Para. 0039, Line 6**) and destination IP addresses (*corresponding network address*, **Qiao, Para. 0039, Line 8**) and port numbers (*Note that IP address and port of the media gateway controller configured on the media gateway MG2 is the second network address in Qiao, Para. 0033, Line 5-7, therefore, port is disclosed as a part of network address*) of the received message, replacing the data of the application layer, updating a signaling state and/or creating session table (*forwarding table*, **Qiao, Para.0039, Line 5**) items.

As to claim 14, **Qiao** teaches the apparatus according to claim 13, wherein after the signaling proxy (*agent equipment*, **Qiao, Para. 0033, Line 1**) receives a message sent from the server, it replaces source address (*media information*, **Qiao, Para. 0041, Line 5**) of the message with destination address (*corresponding network address*, **Qiao, Para. 0041, Line 6**) of said original message sent from a proxied side and destination address (*media information*, **Qiao, Para. 0041, Line 5**) of the message sent from the server with a proxied side address (*corresponding network address*, **Qiao, Para. 0041, Line 6**) respectively, and forwards (*sends*, **Qiao, Para. 0041, Line 8**) the message according to the replaced addresses.

As to claim 15, **Qiao** teaches a method for implementing signaling proxy according to claim 3, further comprising: when receiving a message from a proxied side, the signaling proxy (*signaling agent*, **Qiao, abstract, line 1**) determines that the received message needs to be proxy processed according to information of its destination address; replacing (*replaced*, **Qiao, Para. 0039, Line 7**) destination address (*relevant media stream network address*, **Qiao, Para. 0039, Line 6**) of the received message with a server address (*corresponding network address*, **Qiao, Para. 0039, Line 8**) and source address (*relevant media stream network address*, **Qiao, Para. 0039, Line 6**) with a server side address (*corresponding network address*, **Qiao, Para. 0039, Line 8**) of the signaling proxy respectively, and forwarding (*forwarded*, **Qiao, Para. 0039, Line 10**) the message.

As to claim 16, **Qiao** teaches a method for implementing signaling proxy according to claim 2, wherein said signaling proxy (*signaling agent*, **Qiao, abstract, line 1**) processing comprises: changing (*replaced*, **Qiao, Para. 0039, Line 7**) source (*media stream network address*, **Qiao, Para. 0039, Line 6**) and destination IP addresses (*corresponding network address*, **Qiao, Para. 0039, Line 8**) and port numbers (*Note that IP address and port of the media gateway controller configured on the media gateway MG2 is the second network address in Qiao, Para. 0033, Line 5-7, therefore, port is disclosed as a part of network address*) of the received message, replacing data of the application layer, updating a signaling state and/or creating session table (*forwarding table*, **Qiao, Para.0039, Line 5**) items.

As to claim 17, **Qiao** teaches a method for implementing signaling proxy according to claim 2, wherein before the signaling proxy receives a message, a forwarding strategy is configured in a network device (*signaling agent*, **Qiao, abstract, line 1**) through which a message sent by a proxied side passes (**Qiao, Para. 0033. Note that Agent equipment has at least two network addresses, therefore forwarding strategy configuration is implicitly disclosed**), the forwarding strategy stipulating that a forwarding path of the message to be proxy processed passes through the corresponding signaling proxy (**Qiao, Para. 0039**).

As to claim 18, **Qiao** teaches a method for implementing signaling proxy according to claim 17, wherein when the network device receives a message which is sent from the proxied side and needs to be proxy processed, it forwards the received message to the signaling proxy (*signaling agent*, **Qiao, abstract, line 1**) according to the forwarding strategy (*note that **Qiao, Para. 0039** and “multiple agent equipments may realize the media gateway traversing through multiple networks for many times, stage by stage”, **Qiao, Para. 0063, Line 14-16**, therefore, the strategy of forwarding to signaling proxy with multiple signaling proxies is disclosed*).

As to claim 19, **Qiao** teaches a method for implementing signaling proxy according to claim 17, wherein in the signaling proxy (*signaling agent*, **Qiao, abstract, line 1**), information of the forwarding path of a message returned from the server is obtained in a configuration or study way and recorded (**Qiao, Para. 0041**); and after the signaling proxy (*signaling agent*, **Qiao, abstract, line 1**) receives the message returned from the server, it forwards the message according to the recorded information (**forwarding table, Qiao, Para. 0041, Line 4**) of the forwarding path.

As to claim 20, **Qiao** teaches that wherein said network device is configured to be a default gateway (*signaling agent*, **Qiao, abstract, line 1**. *Note that “Agent equipment 1 has at least two network addresses, in which one is a first network address in network 1 of the media gateway controller MGC side, and other one is a second network address in network 2” in **Qiao, Para. 0033, Line 1-4**, therefore Agent*

Art Unit: 2441

*equipment 1 is a gateway of network 2) of the signaling proxy (signaling agent, Qiao, abstract, line 1), and when the signaling proxy receives the message returned by the server, it processes said message and sends the processed message to the default gateway (Qiao, Para. 0041).*

### ***Response to Arguments***

3. Applicant's arguments filed 04/29/2009 have been fully considered but they are not persuasive.

In response to applicant's argument that "Qiao does not teach or suggest configuring a proxy processing strategy in a signaling proxy", the examiner respectfully disagrees. Qiao discloses there are forwarding port and forwarding table on an agent equipment and the agent equipment adds and modifies records in the table according the signaling from MEGACO in Para. 0039 and Para. 0021, 0022, 0023, 0024.

Therefore, Qiao disclose there is a proxy processing strategy and configuring the strategy according to the signaling.

In response to applicant's argument that "Qiao fails to teach or suggest a unit configured with a proxy processing strategy", the examiner respectfully disagrees. As disclosed in Para. 0021, 0022, 0023, 0024 of Qiao, an agent equipment performs proxy process.

***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RUOLEI ZONG whose telephone number is (571)270-7522. The examiner can normally be reached on 8:30 AM - 6:00 PM, 5-4-9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WING F. CHAN can be reached on (571)272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2441

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. Z./

Examiner, Art Unit 2441

/Quang N. Nguyen/

Primary Examiner, Art Unit 2441